

Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed**1.1. Name of the Data, data collection Project, or data-producing Program:**

Northeast Regional Cod Tagging Program

1.2. Summary description of the data:

Scientific justification: Canadian and US stock assessments for Atlantic cod indicate considerable fluctuation in stock abundance and recruitment over the last 20 years. This recovering resource is regulated on a stock-by-stock basis, with varying management measures in place. Since the 1920s, a number of small-scale, independent tagging studies were conducted, but each varies considerably in spatial and geographic coverage, tagging technique, and the information collected. Furthermore, information was rarely shared between programs. The Northeast Regional Cod Tagging Program was initiated to study cod movements using a standardized technique on a region-wide scale, whilst

simultaneously achieving international collaboration between fishermen and scientists. The data will compliment future stock assessments by providing current information on movement patterns and growth in the Gulf of Maine and neighboring waters.

Technical objectives (prioritized):

1) Identify the migration patterns of Atlantic cod throughout the Gulf of Maine and neighboring

Canadian and US waters;

2) Identify the extent of mixing between cod in these water bodies;

3) Obtain in situ growth increment information;

4) Investigate the roles of temperature, depth and reproductive condition on migration and

growth.

1.3. Is this a one-time data collection, or an ongoing series of measurements?

Ongoing series of measurements

1.4. Actual or planned temporal coverage of the data:

2003 to Present

1.5. Actual or planned geographic coverage of the data:

Gulf of Maine and neighboring waters in Maritime Canada: Georges Bank,

Nantucket Shoals, Coxes Ledge, Cashes Ledge, Fippennies Ledge, nearshore Western Gulf of Maine, nearshore Downeast Maine, ledges around Jordan Basin, Browns Bank, Digby Neck & Bay of Fundy

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

Table (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: not applicable

Platform: fishing vessels

Physical Collection / Fishing Gear: 1) Commercial otter trawls (mesh sizes 5.5", 6.0" and 6.5") and relatively short tows (~20-30 min); 2) commercial hook gear (handline, manual rod & reel, electronic rod & reel, long-line); 3) recreational hook gear (handline, manual rod & reel); 4) lobster traps (very few); and 5) gillnet

1.8. If data are from a NOAA Observing System of Record, indicate name of system:**1.8.1. If data are from another observing system, please specify:****2. Point of Contact for this Data Management Plan (author or maintainer)****2.1. Name:**

Larry Alade

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

Northeast Fisheries Science Center

2.4. E-mail address:

larry.alade@noaa.gov

2.5. Phone number:

508-495-2085

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

Patricia L Jones

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

Unknown

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

Data management of the NRCTP data was initially undertaken by GMRI, the contracted data "clearing house". Each program partner entered their tag release data via a password protected, online, custom-made, relational database which was developed in SQL Server. This online database avoided the need for software updates for the multiple program partners as the database evolved and increased in sophistication. Significant automated quality control (QC) tools was built into numerous fields allowing the data to be error checked as it is entered. Program partners then "submitted" their data in order that GMRI could verify or "approve" it again, before committing it to the database. Recaptures were entered solely by GMRI, and again underwent a QC approval process.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**5.2. Quality control procedures employed (describe or provide URL of description):**

Significant automated quality control (QC) tools was built into numerous fields allowing the data to be error checked as it was entered. GMRI verified or "approved" the data entered by program partners before committing it to the database. Recaptures were entered solely by GMRI, and again underwent a QC approval process.

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

6.1.1. If metadata are non-existent or non-compliant, please explain:

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

<https://inport.nmfs.noaa.gov/inport/item/27389>

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: <https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf>

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

Yes

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

Northeast Fisheries Science Center

7.2.1. If data hosting service is needed, please indicate:**7.2.2. URL of data access service, if known:**

ftp://ftp.nefsc.noaa.gov/

7.3. Data access methods or services offered:

NEFSC Data Access Procedure:

1. Formal request in writing usually to the data owner/contact or Center Director;
2. Requester is contacted by data owner to review and verify the request content and details for data delivery options.
3. If data is confidential then owner will determine if the data may be released to the requester;
4. If data can be released, the data is downloaded and packaged for delivery electronically; or the requester may be directed to where the data is available online.

7.4. Approximate delay between data collection and dissemination:

Not applicable since data has already been processed

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**8. Data Preservation and Protection**

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

To Be Determined

8.1.1. If World Data Center or Other, specify:**8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:**

Data will be archived once a solution for archiving relational data sets is defined

8.2. Data storage facility prior to being sent to an archive facility (if any):

NEFSC Woods Hole Lab - Woods Hole, MA

8.3. Approximate delay between data collection and submission to an archive facility:

Unknown

8.4. How will the data be protected from accidental or malicious modification or

deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

Archival of source data preserving unaltered collected data, Scheduled backups, Remote storage backups, Password protection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.